

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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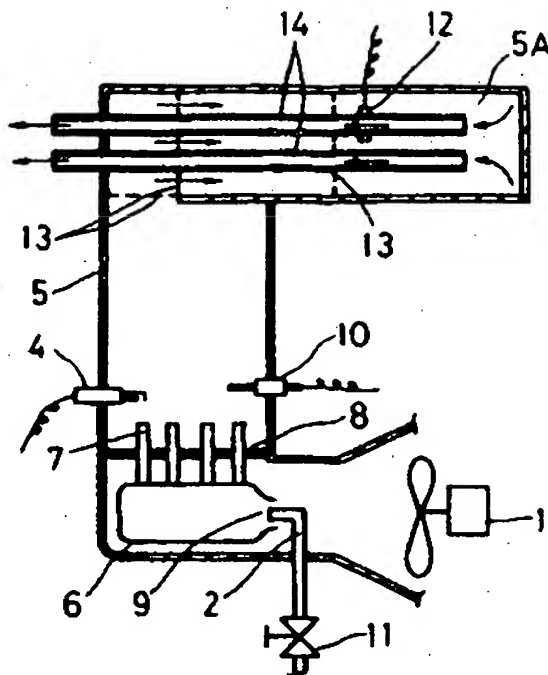
APPLICATION DATE : 14-07-82  
APPLICATION NUMBER : 57122611

APPLICANT : MITSUBISHI ELECTRIC CORP;

INVENTOR : KOMORI HIDEKI;

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TITLE : CATALYTIC COMBUSTION DEVICE



**ABSTRACT :** **PURPOSE:** To equalize the temperature distribution through catalyst bodies by a method wherein the outer wall surface of each of the tubular catalyst bodies having an oxidized catalyst adhered to the inner wall surface thereof is cooled by a premixture of a fuel and air.

**CONSTITUTION:** Combustion gas flows in the direction of arrows and heats tubular catalyst bodies 14. When a detector 12 detects that the catalyst bodies 14 are preheated to a predetermined temperature, a changeover valve 11 closes once and the flames on a multipipe type burner 7 are extinguished. Then, after a flame detector 10 ascertains that the flames are completely extinguished and when the changeover valve 11 is opened and the fuel is supplied, the fuel is mixed with air supplied from a blower 1 to become the premixed gas and the premixed gas reacts within the tubular catalyst bodies 14 to initiate catalytic combustion. Consequently, since the catalyst bodies 14 are cooled by the premixed gas, the temperature of each of the catalyst bodies does not change radically even when the air-fuel ratio and the amount of combustion vary.

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